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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/826,540

04/16/2004

Karlheinz Schreyer

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04/20/2006

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EXAMINER

HUYNH, CHUCK

ART UNIT

PAPER NUMBER

2617

DATE MAILED: 04/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/826,540

Applicant(s)

SCHREYER ET AL.

Examiner

Chuck Huynh

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

Art Unit: 2617

### **DETAILED ACTION**

1. The Art Unit location of your application in the USPTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Art Unit 2617.

#### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

#### ***Information Disclosure Statement***

1. Examiner has considered the IDS submitted on 4/16/2004.

#### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 1 and 7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, the limitation of "waiting by each bidirectional subscriber that has received the message for a period of time individually assigned to ***the subscriber*** to send a confirmation and/or to forward the message to the

Art Unit: 2617

destination or to the central station,” is unclear. It is unclear to which subscriber the limitation is referring, bidirectional or unidirectional subscribers. Examiner will assume that the reference made to the subscriber refers to said bidirectional subscriber. The same problem arises in later a limitation, wherein “during the wait time, switching to receive by each **subscriber**, in order to monitor a radio channel to see if another **subscriber** with a shorter wait time has already confirmed the message and/or forward it to the central station.”

In claim 7, the limitations “...wherein during the wait time, each **subscriber** switches to a receive mode...” and the limitation of “monitoring whether another **subscriber** with a shorter wait time...” and the limitation of “as soon as a **subscriber** receives a confirmation of the message or the fact that it has been forwarded...” are unclear to which subscriber(s) the limitations are referenced.

It is noted that a unidirectional unit can either transmit only or receive only and it is indefinite to whether the subscriber(s) referred within the limitations are unidirectional or bi-directional subscriber(s). To expedite prosecution, Examiner has assumed that the limitations are referring to the bi-directional subscribers. Clarification is required for certainty.

### ***Claim Objections***

3. Claim 9 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim.

Art Unit: 2617

Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

Claim 9 depends on claim 8 and the limitation is the recitation of claim 8 verbatim, and does not further limit the subject matter of claim 8.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aljadeff (WO 00/52658) in view of Menard et al. (US 6,563,910; hereinafter Menard) in further view of Krishnamurthy et al. (US 6,910,024; hereinafter Krishnamurthy).

Regarding claim 1, Aljadeff discloses a method for radio transmission of messages in an alarm signaling system with a central station and a plurality of bidirectional and unidirectional subscribers, in which the central station and the bidirectional subscribers each feature a send and receive unit while the unidirectional subscribers merely possess a send unit and whereby the

Art Unit: 2617

unidirectional subscribers located outside the radio coverage area of the destination of a message of the unidirectional subscriber, which as a rule is the central station, attempt to send messages via one of the bidirectional subscribers to the destination (Abstract; Fig. 3; Pages 7-10, 31-34), comprising the steps of:

- receiving a message sent by a unidirectional subscriber by all bidirectional subscribers within its radio coverage area (Pages 15+, 32: Aljadeff discloses when the alarm sensor detects an alarm, the emergency message is broadcasted to other units within this multi-hop network and eventually to the communication center (central station)). Even though the originating unit has bi-directional capability it is well known in the art that emergency sensors has unidirectional capability.

Menard discloses unidirectional emergency sensors (Col 10, lines 32-44). It would have been obvious to one ordinarily skilled in the art at the time of invention to incorporate unidirectional sensors, which are more cost effective.

Aljadeff in view of Menard discloses all the particulars of the claim except

- waiting by each bidirectional subscriber that has received the message for a period of time individually assigned to the subscriber to send a confirmation and/or to forward the message to the destination or to the central station,

- during the wait time, switching to receive by each subscriber in order to monitor a radio channel to see if another subscriber with a shorter wait time has already confirmed the message and/or forwarded it to the central station, and

Art Unit: 2617

- as soon as a subscriber receives a confirmation of the message or the act that it has been forwarded, suppressing its own confirmation or forwarding of the message.

However, Krishnamurthy discloses the limitations of

- waiting by each bidirectional subscriber that has received the message for a period of time individually assigned to the subscriber to send a confirmation and/or to forward the message to the destination or to the central station (Col 8, lines 20-30),

- during the wait time, switching to receive by each subscriber in order to monitor a radio channel to see if another subscriber with a shorter wait time has already confirmed the message and/or forwarded it to the central station (Col 8, lines 20-30), and

- as soon as a subscriber receives a confirmation of the message or the act that it has been forwarded, suppressing its own confirmation or forwarding of the message (Col 8, lines 20-30).

It would have been obvious to one ordinarily skilled in the art at the time of invention to incorporate Krishnamurthy's disclosure to reduce unnecessary overhead.

Regarding claim 2, Aljadeff in view of Menard in further view of Krishnamurthy discloses the method in accordance with Claim 1, wherein, all bidirectional subscribers first wait to see if the central station has received and

Art Unit: 2617

confirmed the message before they confirm or forward the message in their next available time slot (Col 8, lines 20-30).

Regarding claim 3, Aljadeff in view of Menard in further view of Krishnamurthy discloses the method in accordance with Claim 1, wherein, the order of the wait times and thereby the wait times of the bidirectional subscribers is defined by their address within the radio cell (Col 6, lines 44-64).

Regarding claim 4, Aljadeff in view of Menard in further view of Krishnamurthy discloses the method in accordance with Claim 2, wherein, the order of the wait times and thereby the wait times of the bidirectional subscribers is defined by their address within the radio cell (Col 6, lines 44-64).

Regarding claim 5, Aljadeff discloses the method in accordance with Claim 1, wherein, in the central station the identification of the unidirectional subscriber is checked and in accordance with this check, the message is either accepted or rejected (Page 16, 2<sup>nd</sup> Paragraph). And further more regarding claim 5, Menard also discloses the method in accordance with Claim 1, wherein, in the central station the identification of the unidirectional subscriber is checked and in accordance with this check, the message is either accepted or rejected (Col 1, lines 52+).



Regarding claim 6, Aljadeff discloses the method in accordance with Claim 4, wherein, in the central station the identification of the unidirectional subscriber is checked and in accordance with this check, the message is either accepted or rejected (Page 16, 2<sup>nd</sup> Paragraph). Further regarding claim 6, Menard also discloses the method in accordance with Claim 4, wherein, in the central station the identification of the unidirectional subscriber is checked and in accordance with this check, the message is either accepted or rejected (Col 1, lines 52+).

Regarding claim 7, Aljadeff discloses a method for radio transmission of messages in an alarm signaling system with a central station and a plurality of bidirectional and unidirectional subscribers (Abstract; Fig. 3; Pages 7-10, 31-34), comprising the steps of:

- receiving a message sent by a unidirectional subscriber by all bidirectional subscribers within its radio coverage area (Pages 15+, 32: Aljadeff discloses when the alarm sensor detects an alarm, the emergency message is broadcasted to other units within this multi-hop network and eventually to the communication center (central station)). Even though the originating unit has bidirectional capability it is well known in the art that emergency sensors has unidirectional capability.

Art Unit: 2617

Menard discloses unidirectional emergency sensors (Col 10, lines 32+). It would have been obvious to one ordinarily skilled in the art at the time of invention to incorporate unidirectional sensors, which are more cost effective,

Aljadeff in view of Menard discloses all the particulars of the claim except

- waiting for an individually assigned period of time by each bidirectional subscriber that has received the message to send a confirmation and/or to forward the message to the destination or to the central station, wherein during the wait time, each subscriber switches to a receive mode in order to monitor a radio channel,

- monitoring whether another subscriber with a shorter wait time has already confirmed the message and/or forwarded it to the central station, and

- as soon as a subscriber receives a confirmation of the message or the fact that it has been forwarded, suppressing its own confirmation or forwarding of the message.

However, Krishnamurthy discloses the limitations of

- waiting for an individually assigned period of time by each bidirectional subscriber that has received the message to send a confirmation and/or to forward the message to the destination or to the central station, wherein during the wait time, each subscriber switches to a receive mode in order to monitor a radio channel (Col 8, lines 20-30),

Art Unit: 2617

- monitoring whether another subscriber with a shorter wait time has already confirmed the message and/or forwarded it to the central station (Col 8, lines 20-30), and

- as soon as a subscriber receives a confirmation of the message or the fact that it has been forwarded, suppressing its own confirmation or forwarding of the message (Col 8, lines 20-30).

It would have been obvious to one ordinarily skilled in the art at the time of invention to incorporate Krishnamurthy's disclosure to reduce unnecessary overhead.

Regarding claim 8, Aljadeff in view of Menard in further view of Krishnamurthy discloses the method in accordance with Claim 7, wherein, the order of the wait times and thereby the wait times of the bidirectional subscribers is defined by their address within the radio cell (Col 6, lines 44-64).

Regarding claim 9, Aljadeff in view of Menard in further view of Krishnamurthy discloses the method in accordance with Claim 8, wherein, the order of the wait times and thereby the wait times of the bidirectional subscribers is defined by their address within the radio cell (Col 6, lines 44-64).

Regarding claim 10, Aljadeff discloses the method in accordance with Claim 7, wherein, in the central station the identification of the unidirectional subscriber is checked and in accordance with this check, the message is either

Art Unit: 2617

accepted or rejected (Page 16, 2<sup>nd</sup> Paragraph). Furthermore regarding claim 10, Menard also discloses the method in accordance with Claim 7, wherein, in the central station the identification of the unidirectional subscriber is checked and in accordance with this check, the message is either accepted or rejected (Col 1, lines 52+).

Regarding claim 11, Aljadeff discloses the method in accordance with Claim 9 wherein, in the central station the identification of the unidirectional subscriber is checked and in accordance with this check, the message is either accepted or rejected (Page 16, 2<sup>nd</sup> Paragraph). Furthermore, regarding claim 11, Menard also discloses the method in accordance with Claim 9 wherein, in the central station the identification of the unidirectional subscriber is checked and in accordance with this check, the message is either accepted or rejected (Col 1, lines 52+).

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Rhee, Sokwoo discloses A system includes wireless network devices and a terminal device. The wireless network devices include a base station and plural repeater devices for routing data

Art Unit: 2617

Canada; Ronald G discloses a Wireless machine monitoring and communication system using sensors and repeaters


Refer to form-892 for a complete list.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chuck Huynh whose telephone number is 571-272-7866. The examiner can normally be reached on M-F 8am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duc Nguyen can be reached on 571-272-7503. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Chuck Huynh

  
ELISEO RAMOS-FELICIANO  
PRIMARY EXAMINER